



## EXTREME HEAT ADVISORY

The Western Great Basin will be experiencing very high temperatures (exceeding triple digits) and low RH (single digits), for the foreseeable future. Although we are already familiar with dehydration, heat exhaustion, and heat stroke in the firefighting world, we need to be especially alert as conditions worsen. Here are some things to think about concerning heat-related hazards.

### PREVENTION:

**HYDRATE IN ADVANCE**-Take in fluids BEFORE going out on the line or physical training (it is easier to maintain hydration than catch up).

**MAINTAIN**-Take in fluids throughout the day. USE YOUR THIRST AS A GUIDE if you're excessively thirsty you're probably behind the curve. Have access to MORE fluids than you think you need.

**ELECTROLYTES**-It is possible to DRINK TOO MUCH WATER: include sports drinks (i.e. electrolytes) in your fluid intake. Excessive water intake can cause *hyponatremia* (see below). Avoid salt tablets. 1/3 sports drink 2/3 water is a good rule of thumb.

**MONITOR**: Watch your urine: It should be almost clear and without smell. If it is changing then you are dehydrating.

### DEHYDRATION/HEAT EXHAUSTION: *WHAT TO LOOK FOR*

#### EARLY DEHYDRATION:

Fatigue  
Loss of appetite  
Flushed skin  
Heat intolerance  
Lightheadedness

#### SEVERE DEHYDRATION:

Difficulty Swallowing  
Stumbling and clumsiness  
Delirium  
Muscle Spasms  
Painful urination

#### TREATMENT:

**Contact qualified medical personnel as soon as possible.**

If that is not an option follow these steps:

Get out of direct sunlight and lie down in a cool spot, such as in the shade or an air-conditioned area. Prop up your feet. Take off/loosen any extra clothes. Drink a

rehydration drink, water, juice, or sports drink to replace fluids and minerals.  
Drink 2 quarts of cool liquids over the next 2 to 4 hours.

## **HEAT STROKE:**

### **SYMPTOMS:**

- High body temperature
- The absence of sweating, with hot red or flushed dry skin
- Rapid pulse
- Difficulty breathing
- Strange behavior
- Hallucinations
- Confusion
- Agitation
- Disorientation
- Seizure
- Coma

It is important to note that sometimes a person experiences symptoms of heat exhaustion before progressing to heat stroke.

### **TREATMENT:**

**Heat stroke is a serious medical condition that requires immediate treatment. Qualified medical personnel should be notified as soon as possible.**

If qualified medical personnel are not immediately available, the following procedures are recommended:

***First and foremost, cool the victim.*** Get the victim to a shady area, remove clothing, apply cool or tepid water to the skin (for example you may spray the victim with cool water from a hose), fan the victim to promote sweating and evaporation, if available, place ice packs under armpits and groins. Monitor body temperature with a thermometer and continue cooling efforts until the body temperature drops to 101-102 degrees. Always notify emergency services immediately. If their arrival is delayed, they can give you further instructions for treatment of the victim.

## **HYPONATREMIA:**

Excess water intake (water intoxication) can lead to a disturbance in fluid electrolyte balance and an abnormally low level of plasma sodium. The risk is more pronounced during long duration exertion in the heat, in events like prolonged work (i.e. wildland firefighting). When excess water intake is combined with loss of sodium in sweat the risk grows. Moderate symptoms are stomach ache or nausea. More pronounced symptoms include fatigue, confusion, disorientation, throbbing headache, vomiting, wheezy breathing, swollen hands and feet. Seizures, coma, and death are possible in rare cases.